



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,400

06/12/2006

Hans-Michael Graf

2004P04893

2368

24131 7590 12/08/2008
LERNER GREENBERG STEMER LLP
P O BOX 2480
HOLLYWOOD, FL 33022-2480

EXAMINER

WILLIAMS, ARUN C

ART UNIT

PAPER NUMBER

2838

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,400	Applicant(s) GRAF ET AL.	
	Examiner ARUN WILLIAMS	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/5/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 15-18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable by Tegge et al,(Tegge), USPAT6,252,406.

As for claim 24, Tegge discloses and shows in Fig. 1 a battery sensor, comprising: an ammeter (32) for determining a battery current, an evaluation unit (40), and a microprocessor (30), configured such that, during an idle phase in which main electrical consumers assigned to a battery are switched off: said microprocessor is switched off; said evaluation unit is configured to determine, at given first time intervals, a test signal from said ammeter for a given first time duration, and to assign thereto first current values, said evaluation unit monitoring the values to check whether a first threshold current value has been exceeded and/or whether the current has dropped below a second threshold current value; when the current has exceeded the first current value or has dropped below the second threshold current value, said microprocessor is placed in a switched-on state and for a given second time duration, the test signal from said ammeter is determined by said evaluation unit and second current values are assigned thereto, the values then being evaluated in said microprocessor; said microprocessor initiating given procedures for maintaining the electric charge in the battery if a given condition depending on the second current values is met; and wherein the first time duration is shorter than the second time duration (Abstract & col.1-2)).

Tegge discloses the claimed invention except for a second current values are more precise than the first current values. It would have been obvious to one of ordinary skill in the art at the time of the invention was made for the second current values are more precise than the first current values since it was known in the art that sensing

values within a duration longer than a first duration will have more sensed values for determining a result which would be more precise than the result from the first duration which would have less sensed values.

Claims 15-18 are obvious in view of the structure and they recite the same elements in a method format.

5. Claims 19,20,25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tegge in view of Naddei, US2005/0168227

As for claims 25 and 26, Tegge differs from the claimed invention because he does not explicitly disclose a voltage divider and a first switch.

Naddei discloses a voltage divider (combination of R3,R4,14,R5) having an input side connected to receive a voltage across the battery, and an output side conductively connected to an input of said evaluation unit (IC1a); a first switch electrically (s1) connected in series with said voltage divider, said first switch having a first switch position shutting off a flow of current through said voltage divider and a second switch position enables the flow of current through said voltage divider (par. [0070]); Furthermore, Naddei also shows a low power resistor (F1) and a second switch (Q1)

Naddei is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use a voltage divider and a first switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Tegge using a voltage divider and a first

switch for advantages such as providing control with battery voltage exceeds a threshold (par.[0070]), as taught by Naddei.

Claims 19 and 20 are obvious in view of the structure and they recite the same elements in a method format.

6. Claims 21-23,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tegge in view of Naddei and further in view of Palanisamy, USPAT5,281,919

As for claims 23,27 and 28, Tegge in view of Naddei differs from the claimed invention because he does not explicitly disclose a voltmeter measuring across the battery and a generator.

Palanisamy discloses and shows in Fig. 1 the battery (108) includes first and a second batteries connected in series, and a voltmeter (112) is connected to measure the voltage across either the first or the second battery and a generator electrically connected in parallel with the battery and a voltmeter connected to measure a voltage of said generator (col.3) and storing parameters in memory (col.10, lines 35-37)

Palanisamy is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use a voltmeter to measure across the battery and a generator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Tegge modified by Naddei using a voltmeter

to measure across the battery and a generator for advantages such as providing the ability to determine certain conditions (col.3, lines 4-5), as taught by Palanisamy.

Claims 21 and 22 are obvious in view of the structure and they recite the same elements in a method format.

Response to Arguments

Applicant's arguments filed 9/5/2008 have been fully considered but are now moot in view of the new grounds of rejection necessitated by amendment.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARUN WILLIAMS whose telephone number is (571)272-9765. The examiner can normally be reached on Mon - Thurs, 6:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-23612361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akm Enayet Ullah/
Supervisory Patent Examiner, Art Unit 2838

Arun Williams
Examiner
Art Unit 2838

/A. W./
Examiner, Art Unit 2838